

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/21639

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G01N 23/00, 21/76

US CL : 436/56, 57, 172, 800; 250/483.1, 486.1, 302, 303

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 436/8, 56, 57, 164, 172, 800; 250/483.1, 486.1, 302, 303

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4,359,641 A (FRANKS et al) 16 November 1982, column 2, lines 45-60, column 5, lines 44-48 and column 6, lines 1-26.	1-4, 8
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Y		25-27
X	US 5,716,855 A (LERNER et al) 10 February 1998, column 1, lines 19-25, column 2, lines 15-64, column 3, lines 20 and 33-39, column 5, lines 8-21 and claims 5, 6 and 16.	1-6, 9-12, 14-22
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Y		13
X	US 5,610,932 A (KESSLER et al) 11 March 1997, column 1, lines 40-56, column 2, lines 45-67, column 3, lines 1-12, and claims 17 and 21.	1-4, 6-7, 16-21, 23-24
Y	US 5,410,155 A (THOMSON et al) 25 April 1995, column 1, lines 50-61, and column 4, lines 11-21.	25-27
A	US 4,594,179 A (HARRAH et al) 10 June 1986, whole document.	1-27

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent published on or after the international filing date	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&"	document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means		
"P" document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search

13 June 2005 (13.06.2005)

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